

Wikimedia adopts Phabricator, deprecates seven infrastructure tools

First hand experiences from a big free software
project on a complex migration

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Aspects of this talk

- Social process (decision making and driving in large community)
- Migration process from previous tools
- Functionality of tool itself (Phabricator)

Wikimedia

- Project and community behind Wikipedia etc.
- Volunteers
- WM Foundation staff
- Dev/Eng teams: Different needs, workflows, tools
- Dev/Eng projects: MediaWiki core, extensions, analytics, network infrastructure, hardware, ...
- Diversity
- FOSS and free knowledge as core values

Tools (one year ago)



Bugzilla

Navigation

[Search bugs](#)

[Advanced search](#)

[Browse projects](#)

[Enter a new bug](#)

[Help](#)

Saved Searches

My Bugs

"My" CC'd Bugs

"Patch" string +
attachment w/
octet mime type

[aklapper@wikimedia.org](#) [Log out](#)



Last modified: 2014-06-23 06:37:59 UTC

[First](#) [Last](#) [Prev](#) [Next](#) *This bug is not in your last search results.*

Bug 51634 - Page actions are wrong for VisualEditor ([edit](#))

[Save Changes](#)

Status: NEW ([edit](#))

Product:

Component: ([Other open bugs](#)
[bugs](#))

Version:

Hardware:

Importance: ([vote](#))

Target Milestone:

Assigned To: [Aaron](#) ([edit](#)) ([take](#))

URL:

Reported: 2013-07-18 20:30 UTC by
[Matthew](#)

Modified: 2014-06-23 06:37 UTC
([History](#))

CC List: ☒ Add me to CC list
11 users ([edit](#))

See Also: ([add](#))

Web browser:

Mobile Platform:

Flags: None yet set ([set flags](#))



WIKIMEDIA
FOUNDATION

#8493: Bugzilla CVE-2014-1572

New ticket in

domains ▾

Search...

^ Ticket metadata

Display

History

Basics

Jumbo

Reminders

Actions ▾



▾ The Basics

▾ Custom Fields

^ People

Owner: Nobody in particular
Requestors: Andre Klapper
Cc: Daniel

▾ Attachments

▾ Reminders

^ Dates

Created: Tue Sep 30 21:15:35 2014
Starts: Not set
Started: Tue Sep 30 21:23:26 2014
Closed: Tue Sep 30 21:23:26 2014
Updated: Fri Oct 03 23:25:03 2014 by Jeremy

▾ Links

^ History

Show all quoted text — Show full headers

Tue Sep 30 21:15:36 2014 **Andre Klapper - Ticket created**
Subject: Bugzilla CVE-2014-1572

Reply

Not yet made public; one-line patch attached which has been verified in the upstream ticket.
Please apply on the live system.

Download (untitled) / with headers
text/html 131b

- (Screenshot of the Mingle software)

- (Screenshot of the Trello software)

Change-Id:	lb755e38dd1521e458badcc817359d1556e0b7a91
Owner	Faidon Liambotis
Project	operations/puppet
Branch	production
Topic	
Uploaded	2014-10-28 01:42
Updated	2014-10-28 01:51
Status	Merged

☆ Commit Message

phabricator: s/noreply/no-reply/

<ocd>Use no-reply@ for originating mails from Phab

Change-Id: [Ib755e38dd1521e458badcc817359d1556e0b7a](#)

Reviewer	Code-Review	Verified
Faidon Liambotis	✓	
Rush	+1	
jenkins-bot		✓

Add Reviewer

► Included in

► Dependencies

 Reference Version: [Base](#) ▼


 ► Patch Set 1 [d14d8ff7ceab713b74793fc989fa19c23188730f](#) ([gitblit](#))

 ▼ Patch Set 2 [c659fba5844cb5c795c24dada0b81182022ecaad](#) ([gitblit](#))

Author	Faidon Liambotis 2014-10-28 01:37
Committer	Faidon Liambotis 2014-10-28 01:44
Parent(s)	fe406c29afc65c9552a1daa9d050834aa6fec567 exim: blackhole noreply@phabricator emails
Download	checkout pull cherry-pick patch Anonymous HTTP SSH HTTP
	git fetch https://gerrit.wikimedia.org/r/operations/puppet refs/changes/90/169290/2 && git che

Between those tools


- its-bugzilla (hook for Gerrit comments in Bugzilla)

Gerrit Notification Bot  2013-08-02 10:27:29 UTC

[Comment 8](#) ☐ Private [\[reply\]](#) [\[-\]](#)

Change 77279 had a related patch set uploaded by Hashar:
run-phpcs-mw: wrapper around phpcs for CI needs

<https://gerrit.wikimedia.org/r/77279>

Gerrit Notification Bot  2013-08-02 10:27:32 UTC

Status: NEW → PATCH_TO_REVIEW

- Bingle and Bugello (custom code)

Problems

- Collaboration between staff and volunteers; teams
- Openness, Transparency, Accountability: Decisions and their communication
- Overlay, Duplication; divide between folks
- Maintenance of tools; programming languages
- Onboarding new contributors (BZ/Gerrit vs Github)
- Bugzilla falls short for project management
- Slow down

The idea

- Find better combination or tools to improve situation
- Developers = main audience of tool

But:

- <http://imgs.xkcd.com/comics/standards.png> (CC BY-NC)

Invite teams / devs to describe needs

Talk:Project management tools/Review

Here's what we'd like to learn from you:

- What are the main technical activities you're involved in in the Wikimedia community?
- What are your workflows for those activities?
- Can you tell us everything you *must* be able to do?
- Similarly, can you tell us everything you *would like* to be able to do that would make your work easier?

You're more than welcome to share additional information. The more detailed your responses, the more likely it is that your needs will be met by the tool(s) we collectively end up choosing.

Use the button below to create your section, see examples and format your information more easily.

Add your section

Phabricator

2014 Project management tools review

- Phabricator migration planning
- [Help](#)
- [FAQ](#)
- [Blockers and Migration prep](#) → in progress
- [Migration plan](#) → in progress

Past steps:

1. ✓ **Share your needs & workflow**
2. ✓ [Consolidated requirements](#)
3. ✓ [Options \(discuss\)](#)
4. ✓ [RFC](#)

24 replies; https://www.mediawiki.org/wiki/Talk:Project_management_tools/Review

Consolidate feedback

- Must vs. would like to
- several categories (e.g. Workflow, Queries, API)
- Make people propose tools that could be options

Discuss, decrease, decide














- Several tool options at beginning; investigate and encourage discussing functionality of tools
- Decrease items in list of tools to consider
- Encourage people to set up test instances
- Feedback quickly turned into one question to ask the community: Move to Phabricator?
- Gather broader community opinion / support via three week „Request for comments“ (RfC)

Phabricator!









- RfC result: General support for moving from our infrastructure tools to Phabricator.
- „a suite of web-based software development collaboration tools [...]. Currently maintained by Phacility, it was originally developed as an internal tool at Facebook. It is available as free software under the Apache License, version 2.“

Source: <https://en.wikipedia.org/w/index.php?title=Phabricator&oldid=641098220>

Core Applications

 Audit Browse and Audit Commits	⚙️	 Conpherence Send Messages	⚙️
 Dashboards Create Custom Pages	⚙️	 Diffusion Host and Browse Repositories	⚙️
 Feed Review Recent Activity	⚙️	 Maniphest Tasks and Bugs	⚙️
 People User Accounts and Profiles	⚙️	 Pholio Review Mocks and Design	⚙️
 Ponder  Prototype Questions and Answers	⚙️	 Projects Get Organized	⚙️
 Sprint  Extension Build Sprints	⚙️		

Utilities

 Files Store and Share Files	⚙️	 Flags Personal Bookmarks	⚙️
 Harbormaster  Prototype Build/CI	⚙️	 Herald Create Notification Rules	⚙️
 Legalpad Agreements and Signatures	⚙️	 Paste Share Text Snippets	⚙️
 Tokens Award and Acquire Trinkets	⚙️		

Set up team with expertise areas

- Phabricator code customizations (PHP)
- Operations (server; network setup)
- Migration script writing
- Communication (community, upstream, ...)
- Bug management
- Other small bits that might fall through the cracks?


Involve stakeholders and further devs

- Product management
- Release management
- Relationship with upstream: Understand their model and attitude, express interest, discuss what's feasible





Basic steps


- Phabricator production instance
 - Phab test instance with Bugzilla data migrated
 - Actual migration of Bugzilla data
 - Migration of RT data
-
- Identify the tasks for each of these steps
 - After #1, use Phab itself for planning (dogfooding)
 - Communicate! Ask users to pre-register in Phab.

Test instance of migrated BZ content

 PHABRICATOR

Search

 T7130 Create Task

Invalid accesskey tooltip on Chrome




☐ Open ☒ Public

Assigned To None








Priority Low


Subscribers None

Author bzimport

Projects  Browser_Support_Google-Chrome
 MediaWiki-JavaScript
 accessibility

ext_ref bz68798

 Edit Task
 Subscribe
 Merge Duplicates In
 Create Subtask
 Edit Blocking Tasks
 Award Token
 Flag For Later

 DESCRIPTION

Author: m4tx

Description:
Have a look at resources/src/jquery/jquery.accessKeyLabel.js:

```
} else if ( profile.name === 'chrome' ) {  
accessKeyPrefix = (  
    profile.platform === 'mac'
```

























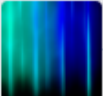

Migrate from BZ to Phab



Migrate from BZ to Phab

- Switch Bugzilla to read-only for good
- Pull phabricator.wikimedia.org and disable its mail
- Switch off random other bots / scripts
- Work around known bugs (Bugzilla XML RPC API)
- Fetch tickets, attachments into DB (74k tickets, ~5h)
- Create tasks, comments, attachments in Phab (~25h)
- Change Bugzilla URL (bz.wm.o -> old-bz.wm.o)
- Set up redirects for Bugzilla IDs to new Phab IDs
- Claim accounts (most active BZ user: ~15 min)

Migrate from BZ: Account claiming

  bzimport added a project: MediaWiki-extensions-WikidataRepo .	  bzimport added a project: MediaWiki-extensions-WikidataRepo .
 bzimport added a subscriber: Unknown Object (????).	 bzimport added a subscriber: wikidata-bugs .
 bzimport set ext_ref to bz50689.	 bzimport set Reference to bz50689.
  bzimport created this task.	  aude created this task.
  bzimport added a comment. aude.wiki wrote: the issue occurs in master, btw	  aude added a comment. the issue occurs in master, btw
  bzimport added a comment. gerritadmin wrote: Change 71863 had a related patch set uploaded by Daniel Kinzler: Add snak validation to wbcreateclaim module. https://gerrit.wikimedia.org/r/71863	  bzimport added a comment. gerritadmin wrote: Change 71863 had a related patch set uploaded by Daniel Kinzler: Add snak validation to wbcreateclaim module. https://gerrit.wikimedia.org/r/71863
  bzimport added a comment. addshorewiki wrote: https://gerrit.wikimedia.org/r/#/c/71863/ Patch Merged	  Addshore added a comment. https://gerrit.wikimedia.org/r/#/c/71863/ Patch Merged

Migrate from BZ to Phab

- Test a lot of stuff (access restrictions etc)
- Update environment (on-wiki templates, docs)
- Run into problems and bugs you never expected (certificates; private comments; search indexer performance; race condition for assignee user claiming; forgot BZ aliases; ...)
- Details: <https://blogs.gnome.org/aklapper/2014/12/17/welcome-phabricator/>

Gains

Unified login

Browser address bar: https://www.mediawiki.org/w/index.php?title=Special:OAuth/authorize&oauth_token=

MediaWiki logo (sunflower)

Special page

OAuth

Allows usage of OAuth 1.0a for API authorization

Hi AKlapper,

phabricator.wikimedia.org would like to have basic access on your behalf on *www.mediawiki.org*.

[Privacy Policy](#)

Mobile view

Navigation links:


- Main page
- Get MediaWiki
- Get extensions
- Tech blog
- Contribute
- Support
 - User help
 - FAQ
 - Technical manual
 - Support desk
 - Communication
- Development
 - Bug tracker
 - Browse repository
 - Code docs
 - Bugs with patch


Frontpage: Bugzilla


Bugzilla - Main Pageversion 5.1


Home | New | Browse | Search | [?] | Reports | My Requests | Preferences | Log out a9016009@gmx.de

Welcome to Bugzilla


File a Bug



Search



User Preferences



Documentation



[?]



Common Queries:

Open bugs assigned to me (0) 

Open bugs reported by me (1) 


Requests addressed to me (0) 

Bugs reported in the last 24 hours  | last 7 days 


Bugs changed in the last 24 hours  | last 7 days 

Home | New | Browse | Search | [?] | Reports | My Requests | Preferences | Log out a9016009@gmx.de





My Bugs
Test1





Frontpage: Phabricator


2


Search





**Maniphest**12
Tasks and Bugs


**Diffusion**
Host and Browse Rep...

**People**
User Accounts and Pr...

**Projects**
Get Organized

**Config**
Configure Phabricator


**Auth**
Login/Registration


**Applications**
Explore More Applicati...

Customize Applications...

Getting Things Done

Phabricator is a collaboration platform open to all Wikimedia and MediaWiki contributors. We focus on bug reporting and software projects. Non-technical initiatives are welcome as well.

 [Report a Problem](#)

 [Phabricator Help](#)

Migration completed

If **your Bugzilla activity** still hasn't been assigned to you, just wait. bzimport is processing the data of more than 800 users. Please be patient.

- Assignee and Author will be updated.
- CC users on tasks will be updated.
- Comment metadata will be updated.

• [Instructions for creating and renaming projects.](#)

• Bugzilla is archived at old-bugzilla.wikimedia.org.

More: mw:Phabricator/versus Bugzilla.

You can learn to use Phabricator, test, and experiment at phab-01.wmflabs.org.


Activity

New TasksClosedMockupsActive Projects


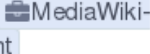
Feed

Tasks (100)



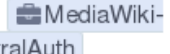
T88221 [mediawiki_selenium 0.4.0 does ...](#)Sat, Jan 31, 8:23 PM

Release-Engineering


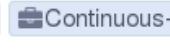
T88219 ["img_auth.php" prevents file re...](#)Sat, Jan 31, 5:59 PM

MultimediaMediaWiki-File-management


T88214 [Special:GlobalRenameRequest ...](#)Sat, Jan 31, 5:06 PM

MediaWiki-HTMLFormUI-StandardizationMediaWiki-extensions-CentralAuth




T88211 [Unable to update OOjs UI librar...](#)Sat, Jan 31, 9:06 PM






LibrarizationContinuous-IntegrationAssigned: [Legoktm](#)

T88209 [Dumps \(or dump progress page...](#)Sat, Jan 31, 8:52 PM

Datasets-General-or-Unknown

Frontpage: Phabricator: Maniphest

 PHABRICATOR  2 

Search     

QUERIES

Assigned

Phab* by last updated

Project-Creators: Open

Filed ≤8d: Open|Stalled

Filed ≤8d: All

Open with 0 projects

Prio=Unbreak by change

Prio=Unbreak & Unassigned

Prio=High by change

Prio=High & Unassigned

Prio=NeedTriage by change

Status=Stalled

Øchange≤6m & Prio=high(est



Øchange≤2y


Open Tasks

Authored


MW: TM=1.23 & open

MW: TM=1.24 & open

 Query: Assigned 

Showing results for query "Assigned". 

High (3)





T76721 Prepare FOSDEM talk about Wikimedia's move to Phabricator

ECT-January-2015

Wed, Jan 21, 5:16 AM

Assigned: Aklapper







T78617 Decide on "Needs Volunteer" Priority field value in Phabricator

Phabricator

Fri, Jan 23, 6:34 AM

Assigned: Aklapper






T78684 Have next public bug day in February 2015


Engineering-Community

Tue, Jan 27, 8:21 PM

Assigned: Aklapper



Normal (5)





T86457 Write and publish blogpost summarizing Wikimedia's participation in Google Code-in 2014

Wikimedia-Blog ECT-February-2015 Google-Code-in-2014

Fri, Jan 30, 10:18 PM

Assigned: Aklapper







T87811 Sort out Wikimedia GCI mentor grand prize trip

Google-Code-in-2014

Fri, Jan 30, 2:33 PM

Assigned: Aklapper






T76942 Allow to search tasks about MediaWiki core and core only (create MediaWiki umbrella project?)

MediaWiki-General-or-Unknown Phabricator Project-Creators MediaWiki-Core-Team

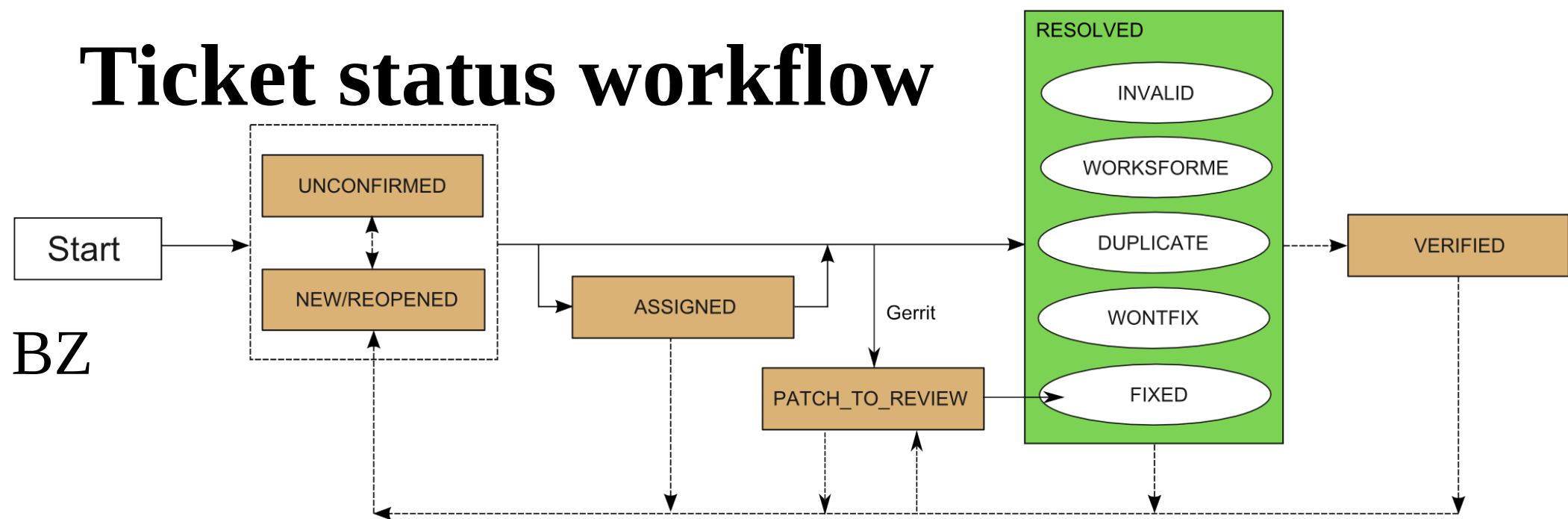
Sat, Jan 31, 9:22 PM

Assigned: Aklapper

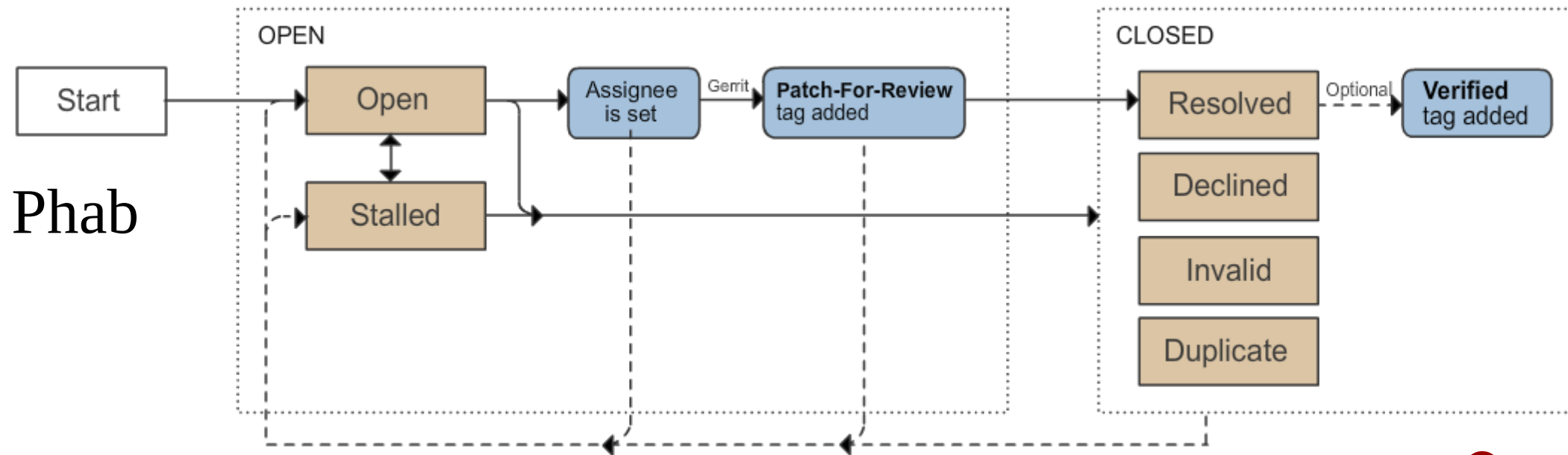


Ticket status workflow

BZ



Phab



Source: https://www.mediawiki.org/wiki/File:Bug_Life_Cycle_Diagram.png (by Unicodesnowman, Valerie Juarez, Andre Klapper, CC BY-SA)

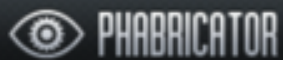
Workboards

Phabricator Board - Iceweasel

Phabricator Board

https://phabricator.wikimedia.org/project/board/5/

DuckDuckGo



Search



Phabricator

Public

Sort: Natural

Filter: O

Backlog (Default)

67

T75720 my account page doesn't seem to work?



T75718 Phabricator buttons don't have alt or title attributes



T75715 Audit feedback form in Diffusion commits



T1327 Make sure gerrit notification bot will handle redirected bugs properly



QChris

T75713 Phabricator mails Message-ID has localhost.localdomain



T690 Import Bugzilla component descriptions and set them as Phabricator project description?



Aklapper

T75703 Decide what to do with tracking bugs



T73245 Write Quips extension for Phabricator



Need discussion

16

T75722 Add a site notice which explains the transition



T763 Phabricator far too spammy and off-topic to continue posting to wikibugs-l



T991 Introducing Bugzilla / RT / Reference number in search should find the corresponding task



T75699 Bugzilla default CCs were not imported as Members of the corresponding Phabricator project



T545 Clearer instructions in the Phabricator login page



T706 Broaden the group of users that can create projects in Phabricator



T929 New project: "Wikimedia Incident Response"



Chad

T256 Replace default avatar icon



Ready to Go

3

T159 There should be a better way of communicating the message about exceeding size limit while uploading file in Phabricator



T371 "Execute Query" button name is overcomplicated, could just be "Search"



T798 Change "Real Name" string for "Name"











Doing

T1292 Limiting Bal users

Ogil

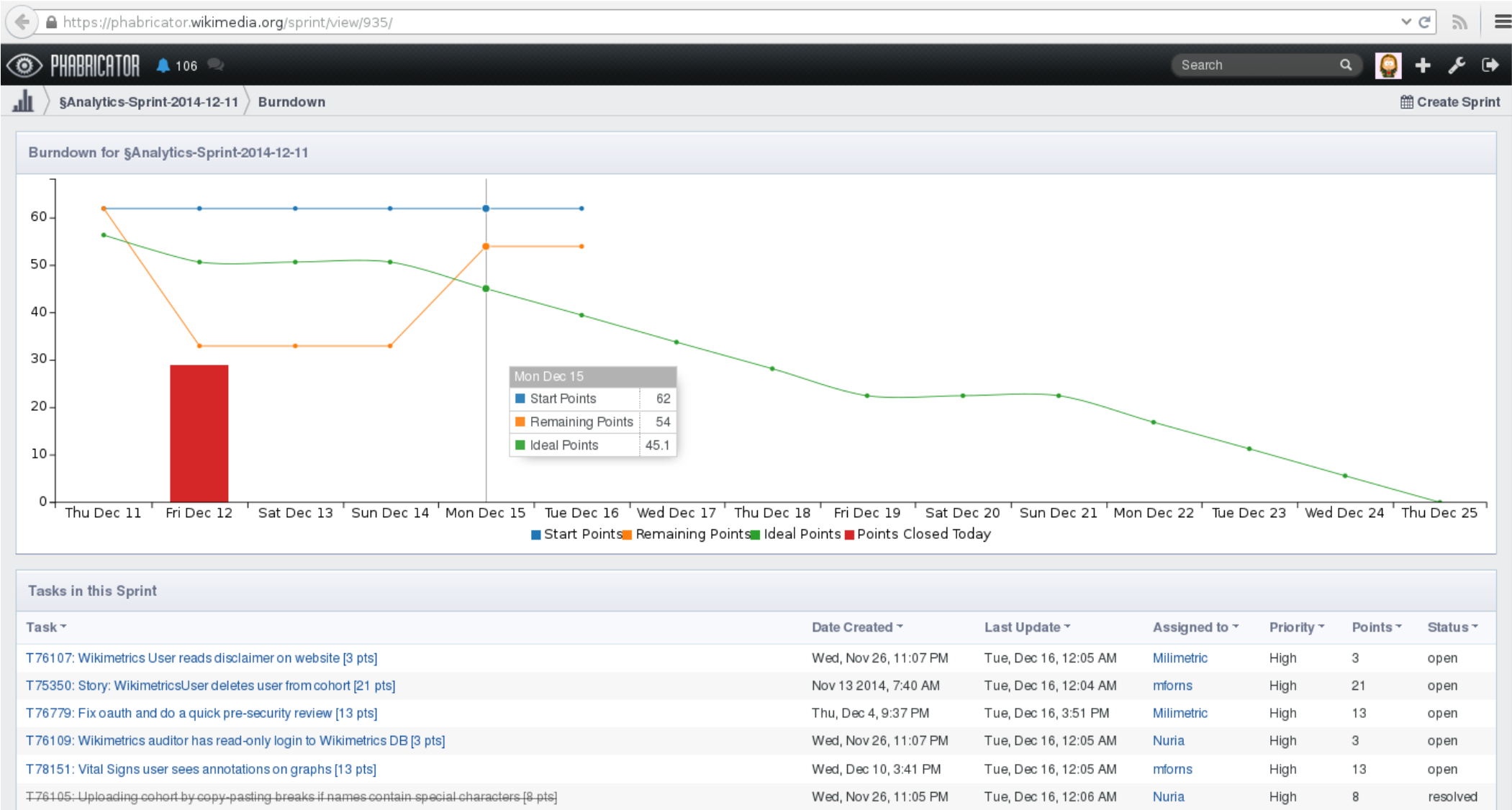
Workboards per project

 PHABRICATOR  102  Search  +  

 **MediaWiki-Developer-Summit-2015**  Public Sort: Natural Filter: Open Tasks Manage Board

50 people classroom 12 / 20	40 people theater 3 / 20	24 people classroom 9 / 10	Logistics
T86946 Language and Localization Services	T86563 MediaWiki Developer Summit 2015 panel proposal: MediaWiki Stakeholders' Group Meet-Up Mglaser	T87485 Burning down the house: WTF is a burn down chart and what can it do for me?	T87514 Achievements learned, and MediaWiki D
T87240 MediaWiki Farmers user group meetup at the 2015 MediaWiki Developer Summit	T86750 2015 MediaWiki Developer Summit - State of continuous integration (CI), what we did in 2014	T85280 Using EventLogging and Dashboards	T86801 Video at MediaWiki Rfarrand
T87289 MediaWiki Developer Summit 2015: Building websites with MediaWiki + Lua Yurik	T86752 2015 MediaWiki Developer Summit - State of continuous integration (CI), what we want to do in 2015	T86132 BounceHandler extension for MediaWiki at 2015 MediaWiki Developer Summit 01tonythomas	T86118 Ether MediaWiki D notes Spage
T86735 Making sure it's easy for volunteers to contribute to Apps.		T85164 Convert extensions to use new Config features workshop at 2015 MediaWiki Developer Summit	T76498 Final Developers S Rfarrand
T86792 workshop on design research in product development at developer		T86079 WIP: API Session	

Burndown charts for sprint projects



Flat namespace; $0-\infty$ projects per task

Blocks T50429: Support editing parts of a page in VisualEditor
T54365: Explore performance gains from progressive (JIT?) de-alienation
T54091: The read HTML should have hinting to allow full DOM copying

Blocked By T78676: Store & load data-mw separately
~~T48811: Fix parsing of infobox templates used in table attribute position~~
T1228: RESTbase deployment

Sprints 🚚 \$ VisualEditor Q3 (Backlog)

Projects 🗑 Parsoid (VE Q3)
📁 Performance (Backlog)
🗑 MediaWiki-Interface (Backlog)
☂ VisualEditor (Next up: Performance)
👥 Services
📁 Service-Architecture
🗑 RESTBase (Backlog)
📁 Blocked-on-Services (Backlog)
🗑 VisualEditor-Performance (Backlog)
🚚 \$ VisualEditor Q3 (Backlog)
📁 Epic

What's next?

- Increase acceptance across teams
- Ensure effective and consistent workflows (teampractices mailing list)
- Maintenance (selective local patches)
- Continue migration from Mingle / Trello
- Migrate Code repository browsing
- ...

Migrate code review and CI

⚙ Differential > D10898

+ Create Diff

Expose transaction PHID in maniphest.gettasktransactions

✓ Closed 🌐 Public

Author [epriestley](#)

Reviewers ☐ [btrahan](#)
☐ [chad](#)
☒ [20after4](#)

Repository [rP Phabricator](#)

Lint ★ Automatic diff as part of commit; lint not applicable.

Unit ★ Automatic diff as part of commit; unit tests not applicable.

Maniphest Tasks [T6629: Expose transaction phid in maniphest.gettasktransactions](#)

Commits [rPe5777cc849bd: Expose transaction PHID in maniphest.gettasktransactions](#)

Apply Patch [arc patch D10898](#)

Arcanist Project [phabricator](#)

Subscribers [20after4](#), [epriestley](#)

Projects *None*

Press ? to show keyboard shortcuts. ?

- Edit Revision
- Edit Dependencies
- Edit Maniphest Tasks
- Download Raw Diff
- Subscribe
- Start Tracking Time
- Award Token
- Flag For Later

☰ SUMMARY

Fixes [T6629](#).

📄 TEST PLAN



Closed by commit **rPe5777cc849bd: Expose transaction PHID in maniphest.gettasktransactions** (authored by **epriestley**). ·
Via Daemons · Nov 24 2014, 10:59 PM



This revision was automatically updated to reflect the committed changes.

Revision Update History

Diff	ID	Base	Description	Created	Lint	Unit		
Base			Base					
Diff 1	26182	b5f7e9e		Nov 24 2014, 10:43 PM				
Diff 2	26184	895b558	Commit rPe5777cc849bdcc4b1190d1fa6182fc373efffba4	Nov 24 2014, 10:59 PM				

Whitespace Changes: [Show Diff](#)

Local Commits

Commit	Tree	Parents	Author	Summary	Date
da50051a4a6b	6e737c225c5c	b5f7e9eec60a	epriestley	Expose transaction PHID in maniphest.gettasktransactions (Show More...)	Nov 24 2014, 10:42 PM

Table of Contents

Path	Coverage (All)	Coverage (Touched)
------	----------------	--------------------



WIKIMEDIA
FOUNDATION

So is Phabricator something for you?

- Upstream's project management / understanding
- Unstable API for 2-3 years (customization = costs)
- CLA - https://secure.phabricator.com/book/phabcontrib/article/contrib_intro/
- Know the needs of your projects and developers
- Involve community and stakeholders in discussions:
Communicate early, often, wide and transparent.

Documentation; Questions

[https://www.mediawiki.org/
wiki/Phabricator](https://www.mediawiki.org/wiki/Phabricator)
(/Code; /Project_management; etc)

<aklapper@wikimedia.org>
<qgil@wikimedia.org>